AMENDMENTS TO THE CLAIMS

Claims 1-62 (Canceled)

63. (New) A method for decoding M encoded audio channels representing N audio channels, where N is two or more, and a set of one or more spatial parameters, the method comprising:

    a) receiving said M encoded audio channels and said set of spatial parameters,

    b) deriving N audio signals from said M encoded channels, wherein each audio signal is divided into a plurality of frequency bands, wherein each band comprises one or more spectral components, and

    c) generating a multichannel output signal from the N audio signals and the spatial parameters,

whereby

M is two or more,

at least one of said N audio signals is a correlated signal derived from a weighted combination of at least two of said M encoded audio channels,

said set of spatial parameters includes a first parameter indicative of the amount of an uncorrelated signal to mix with a correlated signal and

step c) includes deriving at least one uncorrelated signal from said at least one correlated signal, and controlling the proportion of said at least one correlated signal to said at least one uncorrelated signal in at least one channel of said multichannel output signal in response to one or ones of said spatial parameters, wherein said controlling is at least partly in accordance with said first parameter.

64. (New) The method of claim 63 wherein step c) includes deriving said at least one uncorrelated signal by applying an artificial reverberation filter to said at least one correlated signal.

65. (New) The method of claim 63 wherein step c) includes deriving said at least one uncorrelated signal by applying a plurality of artificial reverberation filters to said at least one correlated signal.

66. (New) The method of claim 65 wherein each of said plurality of artificial reverberation filters has a unique filter characteristic.

67. (New) The method of claim 63 wherein said controlling in step c) includes deriving a separate proportion of said at least one correlated signal to said at least one uncorrelated signal for each of said plurality of frequency bands, at least partly in accordance with said first parameter.

68. (New) The method of claim 63 wherein said N audio signals are derived from said M encoded audio channels by a process that includes dematrixing said M encoded audio channels.

69. (New) The method of claim 68 wherein the dematrixing operates at least partly in response to one or ones of said spatial parameters.

70. (New) The method of claim 63 further comprising shifting the magnitudes of spectral components in at least one of said N audio signals in response to one or ones of said spatial parameters.

71. (New) The method of claim 63 wherein said multichannel output signal is in the time domain.

72. (New) The method of claim 63 wherein said multichannel output signal is in the frequency domain.

73. (New) The method of claim 63 wherein N is 3 or more.

74. (New) An apparatus comprising means adapted to carry out each of the steps of any one of the methods of claims 63 – 73.